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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/456,371	12/08/1999	HEINRICH BOLLMANN	12010	6395

28484 7590 09/28/2005

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EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/456,371

Applicant(s)

BOLLMANN ET AL.

Examiner

Victor S. Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19, 20, 22, 23 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19, 20, 22, 23 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Introduction

1. The Examiner has carefully considered Applicants' amendments and remarks filed on 8/25/2005. Applicants' amendments to claim 19 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Rejections not maintained are withdrawn. In particular, Applicants' amendment overcomes the art rejections set forth in the Examiner's Answer dated 4/5/2005. However, an additional search is required, and it yielded a new reference. The new reference is found to anticipate and/or render obvious the instant claimed invention. Applicant's comments regarding the prior art are moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one

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skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

More particularly, upon reconsideration, it is noted that claim 23 is added in an amendment dated 9/7/2001. However, nowhere in the original specification is there a support for the structural element "elastomer layer is bonded to an outer surface of said molding", and appears to be a new matter. Applicants are required to either point out a clear support, or cancel the new matter.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 19, 20 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Renzo (Derwent abstract of FR 2559862A).

First, It is noted that the preamble of the independent claim 19 has been amended to recite, inter alia, "A motor vehicle composite damping element ... a shock-absorber of a motor vehicle ...".

In response, a new search yielded a reference by Renzo. Renzo teaches a composite shock absorber comprises a compressible elastic profile (51), with a cellular material confined within or between bellows (50) of flexible impermeable material. The

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bellows (50) is a blow molded profile of thermoplastic polyurethane (TPU) resin, and the cellular material is an expanded polyurethane developed within and bonded to the internal face of (50) so that the foam density or density distribution produces the overall dynamic compression/stiffness curve required. Optionally, the bellows may have a divergent profile with a foam-filled core. The composite shock absorber is used for vehicle suspension systems in conjunction with a coaxial telescopic piston (2), to eliminate the need to assemble separate shock absorbing elements and protective impermeable gaiters (51) serving as the latter. It is suitable for large compression amplitudes than solid elastic dampers. Also it eliminates the need for a metal cap to confine lateral expansion.

For claim 19, Renzo is silent about the thickness of the thermoplastic polyurethane molding. However, since Renzo teaches the same subject matter (a composite shock absorber for a motor vehicle comprising a cellular polyurethane bonded to a thermoplastic polyurethane molding), it is the Examiner's position that, in the absence of evidence to the contrary, a suitable thickness of the thermoplastic polyurethane molding is either anticipated, or obviously provided by practicing the invention of prior art. It should be noted that where the claimed and prior art products are shown to be identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established. See MPEP § 2112.01.

For claim 20, Renzo is silent about the density and mechanical properties of the PU foam. However, Renzo does teach that the foam density or density distribution

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produces the overall dynamic compression/stiffness curve required, as set forth above.

As such, the Examiner repeats that since Renzo teaches substantially the same subject matter, in the absence of evidence to the contrary, the density and mechanical properties of the PU foam is either anticipated, or obviously provided by practicing the invention of prior art.

For claim 22, Renzo expressly teaches that the expanded polyurethane developed within and bonded to the internal face of the molded bellows (50).

8. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Renzo (Derwent abstract of FR 2559862A) in view of Zeitler et al. (US 5,288,549).

The teachings of Renzo are again relied upon as set forth above.

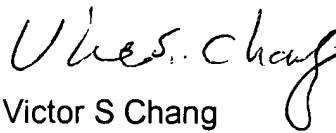
For claim 30, Renzo is silent about the ratio of the isocyanate groups to isocyanate reactive groups. However, it is noted that Zeitler et al. (US 5,288,549) invention relates to a TPU prepared by having a ratio of isocyanate groups to isocyanate reactive groups in a range from 0.85:1 to 1.1:1 provides rigidity technically required for base layers in a composite element (column 3, lines 15-23). As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art of TPU to optimize and/or select a TPU formed from a suitable ratio of isocyanate groups to isocyanate reactive groups, motivated by the desire to form a shock absorber bellow with desired rigidity.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S. Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H. Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Victor S Chang
Examiner
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9/26/2005